

**HERBICIDAL POTENTIAL OF PARASITIC PLANTS, *Cuscuta*
spp. (DODDER) AND *Salix tetrasperma* (INDIA WILLOW) ON
SELECTED WEED, *Cenchrus echinatus* (BURR GRASS)**

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This Final Year Project Report entitled “**Herbicidal Potential of Parasitic Plants, *Cuscuta spp.* (Dodder) and *Salix tetrasperma* (Indian willow) on Selected Weed, *Cenchrus echinatus* (Burr grass)**” was submitted by Zarina binti Ahmad, in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Biology, in the Faculty of Applied Sciences, and was approved by

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ABSTRACT

HERBICIDAL POTENTIAL OF PARASITIC PLANTS, *Cuscuta spp.* (DODDER) AND *Salix tetrasperma* (INDIAN WILLOW) ON SELECTED WEED, *Cenchrus echinatus* (BURR GRASS)

Weed and parasitic plants are well known as an invasive species as they bring disadvantages to various sectors and have colonized worldwide. The weed, *Cenchrus echinatus* (burr grass) is a disturber because of the thorny seed they produce that can stick to cloths and make them easily disperse. Therefore, parasitic plants, *Cuscuta spp.* (dodder) and *Salix tetrasperma* (indian willow) are used in this project to inhibit growth of weed because they are believed useful in natural herbicide. In this study, the water and methanol extraction of the herbicidal effect were compared. Petri dish bioassay were carry out to observe activity of the parasitic plants extracts on seed germination and seedling growth of weed. All weed's seed was put in open environment with sunlight. Temperature and humidity of air in this experiment was based on the natural environment. The parameters that being observed were the length of leaves and roots, and germination percentage. As for the result, the seeds growth after treated with extraction of parasitic plant showed decrease in length of leaves and roots, germination percentage and numbers of leaves compare to non-treated seeds. Extraction of Dodder shows better results compared to Indian willow. This is due to the differences in allelopathic properties in both plants. In conclusion, this indicate that treatment with extraction of parasitic plant had supressed the growth of weed. The extraction only delay the seeds growth without actually kill them.